

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of)	
)	
Lynk Global, Inc.)	File No. SAT-LOA-20210511-00064
)	
Application for Authority to Deploy and)	
Operate Non-geostationary Satellites to)	
Provide LTE Services to Terrestrial Users)	
)	
)	
)	

PETITION TO DENY OF HUGHES NETWORK SYSTEMS, LLC

Hughes Network Systems, LLC (“Hughes”) hereby submits this petition to deny in response to the above-referenced application filed by Lynk Global, Inc. (“Lynk,” and the “Lynk Application”). The Lynk Application, while posed as a modest request that has no effect on the United States, proposes an unprecedented change to how the FCC treats spectrum allocated for terrestrial use. This kind of change requires detailed examination that considers all of the potential effects of the services that Lynk proposes to offer, something that cannot be done within the context of a standard application proceeding. The FCC should dismiss or defer the Lynk application until it can conduct a rulemaking or other similar proceeding to determine whether to permit use of terrestrial wireless frequencies for satellite communications and, if so, what conditions should apply to such use.¹

¹ These considerations also apply to the application of AST&Science, LLC, File Nos. IBFS File Nos. SAT-PDR-20200413-00034, SAT-APL-20200727-00088, and SAT-APL-20201028-00126. Hughes also is filing this opposition in the AST&Science docket on this date and requests deferral or denial of that application as well.

Hughes is the largest provider of satellite broadband service in the United States, offering 25/3 Mbps speeds across the continental United States, southern Alaska, Puerto Rico and the Virgin Islands.² Hughes is also preparing to launch its latest broadband satellite, the FCC-licensed JUPITER 3, in 2022, which will be capable of providing up to 100 Mbps service in the continental United States. Besides providing consumer services, Hughes also offers important enterprise and government broadband services including disaster relief and emergency communications support. Hughes is interested in this proceeding because Lynk's proposal raises significant questions about how satellite operators can obtain access to spectrum and whether the FCC should grant applications before deciding if a proposed service will be allowed to operate.

Lynk proposes a novel satellite service intended to provide supplemental coverage for wireless services, transmitting to conventional wireless handsets on frequencies assigned for terrestrial use.³ While Lynk says that it has no current plans to provide this service in the United States, it is apparent that the only reason it is not requesting authority now is because it has yet to sign a contract with a U.S. wireless provider.⁴ Indeed, though Lynk's service will operate in the 617-960 MHz frequency band, its application does not request use of those frequencies.⁵

This application puts the cart before the horse. The fundamental question it raises is not whether the FCC should grant authority for a modest constellation of small satellites that will not provide service in the U.S. Rather, the question is whether the FCC should allow the underlying service that Lynk intends to provide and, if so, how that service should be regulated.

² *U.S. News & World Report* has named Hughes as the best satellite broadband service provider in the United States. See *U.S. News & World Report, Best Satellite Internet Providers of 2021* (Dec. 14, 2020) available at <https://www.usnews.com/360-reviews/internet-providers/satellite-internet>.

³ Lynk Application, Legal Narrative at 2.

⁴ *Id.* at 4.

⁵ *Id.* at 7.

For instance, Lyrk says that its tests show that its service will not cause harmful interference to terrestrial wireless service, but acknowledges that those tests are limited, and provides no evidence that the results will be the same at scale.⁶ For that matter, the tests were conducted with selected terrestrial wireless providers, and do not consider potential effects on other providers serving the areas covered by the “super macro cells” generated by Lyrk satellites. The tests also do not appear to have considered the effects of operations by multiple satellite providers or potential harmful interference with other satellite operators providing terrestrial fill-in service.⁷ In fact, Lyrk does not even acknowledge the possibility that others could provide the type of service it proposes.

The Lyrk Application also ignores the most significant questions about its proposed service. It does not describe its ultimate deployment plans, even though they would require many more satellites to offer reliable service; it provides no explanation of how the service fits into the broader regulatory landscape; and it does not indicate how or whether it could share the relevant spectrum with other satellite operators. Further, Lyrk essentially assumes that it is desirable to offer satellite connectivity using terrestrial frequencies even though the FCC experience with terrestrial use of satellite frequencies suggests that such repurposing is complicated and difficult to manage.⁸

⁶ *Id.* at 3; *see* Lyrk Application, UHF Interference Mitigation Analysis, at 7 (describing tests). To offer a practical service of use to customers, it is likely that Lyrk would have to deploy hundreds or thousands of satellites.

⁷ *See* Lyrk Application, UHF Interference Mitigation Analysis at 7. Given the pendency of the AST&Science application, the questions concerning other operators providing the same type of service are arising already.

⁸ *See, e.g.,* Expanding Flexible Use of the 12.2-12.7 GHz Band, *Notice of Proposed Rulemaking*, 36 FCC Rcd 606, 607 (2021) (seeking comment on sharing 12 GHz band between satellite and terrestrial users), LightSquared Technical Working Group Report, *Order and Authorization*, 35 FCC Rcd 3772, 3774, n.6 (2020) (describing history of proceeding since initial applications were

These facts demonstrate that, rather than attempting to consider these issues in an application proceeding or, as Lynk appears to be requesting, authorizing satellites and not addressing the key issues until some later, unspecified date, the FCC should undertake an ordered process to determine whether the public interest would be served by permitting auxiliary satellite use of terrestrial wireless frequencies and, if so, the technical and operational requirements for such use. Such a process, through a notice of proposed rulemaking or a notice of inquiry, would allow the FCC to address all of the relevant issues and to obtain comment from all affected parties. This is far preferable to acting on a single application and setting a precedent that may be difficult to reverse later.

For all of these reasons, the FCC should deny the Lynk Application or defer action on it until it conducts a rulemaking or similar proceeding to consider the issues the application raises.

Respectfully submitted,

Hughes Network Systems, LLC

By: _____/s/_____

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October 12, 2021

filed in 2009); Sirius Satellite Radio, *Consent Decree*, 23 FCC Rcd 12303 (entering into consent decree concerning deployment of auxiliary terrestrial transmitters).

CERTIFICATE OF SERVICE

I, Jennifer A. Manner, hereby certify that on this 12th day of October, 2021 a true and correct copy of the foregoing Petition to Deny was sent by electronic mail to the following:

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